tabs for interlocking interference engagement with the at least two interlock slots. The width of the second lamina is less than the width of the first lamina and one of the at least two interlock slots of each of the laminae is disposed near each of the narrow ends.

As amended, independent claim 40, and claims 41 and 42 which depend therefrom, call for an elongate stack of interlocked laminae which includes first and second elongate rectangular laminae, each of the first and second laminae having first and second generally opposed edges defining narrow ends of the lamina and at least two interlock elements wherein the one of the at least two interlock elements is disposed near each of the narrow ends, and wherein the second lamina has a length equal to the length of the first lamina and a second width which is different from the first width of the first lamina, the first edges of the first and second laminae aligned to define a substantially planar surface of the stack, the substantially planar surface provided with a groove.

As amended, independent claim 43, and claim 44 which depends therefrom, call for a stack which is an elongate cylindrical stack of laminae having a substantially circular cross section, the laminae each being interlocked with an adjacent one of the laminae and having a rectangular shape defining narrow ends, wherein the stack includes a first lamina and a second lamina, the first lamina being the widest of all laminae in the stack, the second lamina width being less than the first lamina width, the lengths of all the laminae being substantially identical. The stack has a substantially planar surface defined by the narrow ends of the laminae, the planar surface including one of a groove and a ridge and wherein one of at least two interlock slots of the first lamina and one of the at least two interlock tabs of the second lamina are disposed near each of the narrow ends of the first and second laminas respectively.

The Examiner argues, inter alia, that the Konda et al. reference teaches "every aspect of the invention except the groove or ridge perpendicular to the lamina" and further argues that Gutmann and Merlano may be combined with Konda et al. in a manner which renders the subject matter of claims 36, 37 and 40-44 obvious.

Although the Gutmann and Merlano patents each disclose stacks of laminae which have ridges or grooves extending along one or more sides of the stacks defined by the edges of the individual lamina, each of the stacks disclosed having such ridges or grooves are formed from laminae which all have substantially the same outer configuration and thus the sides of the stacks defined by the edges of such individual lamina all extend substantially perpendicular to the major planar faces of the individual laminae for the full height of the stack along substantially the entire outer perimeter of the stack.

The substantially cylindrical stack of laminae having lamina of differing widths disclosed in Figure 7 of the Konda et al. patent which is cited by the Examiner is a quite different structure from the stacks disclosed by Gutmann and Merlano which are each formed from laminae which do not differ in width and, therefore, presents unique manufacturing challenges not presented by the stacks disclosed by Gutmann and Merlano. It is respectfully submitted that the cited references do not suggest the combination of Gutmann and Merlano with Konda et al. proposed by the Examiner.

Moreover, it is further noted that each of claims 36, 40 and 43 have been amended hereby to call for at least two interlock features (e.g., slots, elements, tabs) wherein one of the interlock features is disposed near each of the narrow ends of a lamina. The stacks called for in claims 36, 40 and 43 each also call for laminae having different widths and a substantially planar surface defined by narrow ends (or edges defining such narrow ends) of the laminae wherein the substantially planar surface also includes a groove or ridge. Figure 23 of the present application illustrates such an interlocked stack of laminae.

With reference to a differently configured stack, the present application describes that by placing interlock tabs near a common choke surface the bowing or distortion of the lamina can be minimized by limiting the area of the lamina which is stressed by the pressure applied by the alignment surfaces. See e.g., Application, p. 29, lines 3-5.

It is respectfully submitted that the structures called for in claims 36, 37 and 40-44 as amended hereby are patentably distinct over the cited references and the allowance of claims 36, 37 and 40-44 is respectfully requested.

The Examiner has rejected claims 38 and 39 under 35 U.S.C. § 103(a) as being unpatentable over Konda et al. (U.S. Pat. No. 5,632,259), Gutmann (U.S. Pat. No. 577,480) and Merlano (U.S. Pat. No. 5,671,526) and in further view of Allen et al. (U.S. Pat. No. 5,777,537). The Examiner cites Allen et al. for teaching a laminated core having a grain oriented along the flux path and the laminations being coated to provide insulation. Allen et al., however, does not rectify the deficiencies of Konda et al., Gutmann and Merlano discussed above and, thus, claims 38 and 39 are patentably distinct over the cited references for the reasons discussed above with reference to claim 36 from which claims 38 and 39 depend and the allowance of claims 38 and 39 is respectfully requested.

The Examiner has also rejected claims 36-39 under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1, 9, 10 and 11 of U.S.

Patent Application No. 09/710,659. The Examiner further rejected claim 36 as being unpatentable over claim 21 of U.S. Patent Application No. 09/710,659. The Examiner has also rejected claims 40 and 43 under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 32 and 37 of U.S. Patent Application No. 09/710,313. A terminal disclaimer referencing U.S. Patent Application Nos. 09/710,659 and 09/710,313 is being filed contemporaneously herewith and, therefore, the withdrawal of the Examiner's rejection of claims 36-39 under the judicially created doctrine of obviousness type double patenting is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE". In the event Applicant has overlooked the need for any extension of time or payment of fee, Applicant hereby petitions therefor and authorizes that any charges be made to Deposit Account No. 02-0385, Baker & Daniels. Should the Examiner have any further questions regarding any of the foregoing, the Examiner is respectfully invited to telephone the undersigned at (260) 424-8000.

Applicant respectfully requests that a timely Notice of Allowance be issued in this application.

Respectfully submitted,

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Enclosures: "Version With Markings To Show Changes Made"
Postcard

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231, ON: December 2, 2002

BRIAN C. PAULS, REG. NO. 40,122
NAME OF REGISTERED REPRESENTATIVE

SIGNATURE

December 2, 2002
DATE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 36, 40 and 43 have been amended as shown below:

36. (Amended) An elongate cylindrical stack of laminae, said stack having a substantially circular cross-section, said stack comprising at least one first lamina and at least one second lamina, each said laminae having a rectangular shape and having a width and a length, said rectangular shape defining a narrow end, said length of each said lamina being substantially greater than its said width, said first lamina being the widest of all laminae in said stack, said second lamina width being less than said first lamina width, said lengths of all said laminae being substantially identical, each said laminae including [an] at least two interlock [slot] slots, said stack including a top lamina and a bottom lamina, each said laminae, except one of said top lamina and said bottom lamina, having [an] at least two interlock [tab] tabs for interlocking interference engagement with the at least two interlock [slot] slots of an adjacent lamina in said stack, each said lamina in said stack interlocked to another said lamina, said stack having a substantially planar surface defined by said narrow ends of said laminae, said planar surface including one of a groove and a ridge which extends substantially perpendicular to said widths and said lengths, one of said at least two interlock slots of each of said laminae disposed near each of said narrow ends.

40. (Amended) An elongate stack of interlocked laminae comprising:

a first elongate, rectangular, slender, relatively flexible, planar, lamina having [a] at least two first interlock [element] elements, said first lamina having first and second generally opposed edges defining the narrow ends of said rectangular first lamina in a first direction of said stack and having third and fourth generally opposed edges defining the other ends of the first lamina in a second direction of said stack, said first lamina having a length and a first width, one of said at least two first interlock elements being disposed near each of said narrow ends;

a second elongate, rectangular, slender, relatively flexible, planar, lamina having [a] at least two second interlock [element] elements interlocked in an interference fit with said at least two first interlock [element] elements, said second lamina having first and second generally opposed edges defining the narrow ends of said second lamina in said first direction of said stack, one of said at least two second interlock elements being disposed near each of said narrow ends, the second lamina having a length equal to the length of said first

lamina and a second width which is different from said first width, said first edges of said first and second laminae aligned to define a substantially planar surface of said stack, said substantially planar surface provided with a groove which is substantially perpendicular to said first and second directions, said second lamina having third and fourth generally opposed edges defining the ends of said second lamina in said second direction of said stack, one of said third and fourth edges of said first lamina not aligned with said third and fourth edges of said second lamina.

43. (Amended) An elongate stack, said stack formed by a process comprising:

providing a die assembly having means for guiding strip stock material through the die assembly, stamping means and a choke passageway having one of a notch and a protrusion;

stamping a first said lamina in the strip stock material;

stamping at least [one first] two interlock [slot] slots in the first lamina;

stamping one of a notch and a protrusion in a narrow end of the first lamina;

separating the first lamina from the strip stock material;

placing the first lamina into the choke passageway;

engaging one of said notch and said protrusion of the first lamina with respectively one of said protrusion and said notch of the choke passageway and guiding said first lamina into a first stacked position;

stamping a second said lamina in the strip stock material;

stamping at least [a first] two interlock [tab] tabs in the second lamina;

stamping one of a notch and a protrusion in a narrow end of the second lamina;

placing the second lamina into the choke passageway;

engaging one of said notch and said protrusion of the second lamina with respectively one of said protrusion and said notch of the choke passageway and guiding said second lamina onto said first lamina;

at least partially engaging the first said interlock slot and said first interlock tab; and

separating the second lamina from the strip stock material; and

wherein said stack is an elongate cylindrical stack of laminae having a substantially cylindrical cross-section and said laminae each being interlocked with an adjacent one of said laminae and having a rectangular shape defining a width and a length, said rectangular shape further defining said narrow ends, said length of each said lamina being substantially greater than its said width, said first lamina being the widest of all laminae in said stack, said second lamina width being less than said first lamina width, said lengths of all said laminae being

substantially identical, said stack having a substantially planar surface defined by said narrow ends of said laminae, said planar surface including said one of a groove and a ridge which extends substantially perpendicular to said widths and said lengths and wherein one of said at least two interlock slots of said first lamina and one of said at least two interlock tabs of said second lamina are disposed near each of said narrow ends of said first and second laminas respectively.